

Amendments To The Claims

This Listing Of Claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

Claims 1 to 1 (Canceled).

Claim 12 (Currently Amended): A process for the transformation of the a vanadium/phosphorus mixed oxide catalyst precursor of claim 9 into an active vanadium/phosphorus mixed oxide catalyst for the production of maleic anhydride, which said transformation process comprises comprising a heat treatment of the catalyst precursor at a temperatures temperature of up to 600°C to provide said active catalyst, said catalyst having been prepared by a process comprising reacting a source of vanadium in an organic medium in the presence of a phosphorus source, the organic medium comprising:

(a) isobutyl alcohol or a mixture of isobutyl alcohol and benzyl alcohol, and

(b) a polyol in a weight ratio (a) to (b) of 99:1 to 5:95.

Claim 13 (Currently Amended): The process of claim Claim 12 wherein the heat treatment of the catalyst precursor comprises the steps of:

(a) heating the catalyst precursor from room temperature to a precalcination temperature of about 300°C in air or oxygen-depleted air;

(b) keeping the catalyst precursor at said precalcination temperature [[.]];

(c) further heating the precalcined catalyst precursor in nitrogen up to a calcination temperature of about 550°C; and

(d) keeping the precalcined catalysts precursor at said calcination temperature.

Claim 14 (Currently Amended): An active vanadium/phosphorus mixed oxide catalyst for the production of maleic anhydride, that is obtainable prepared by the process of Claim ~~claim~~ 12 ~~or 13~~.

Claim 15 (Currently Amended): A process for the preparation of maleic anhydride, ~~which~~ that comprises converting a feeding gas comprising (i) a non-aromatic hydrocarbon having a least 4 carbon atoms and (ii) oxygen or an oxygen-containing gas, in the presence of the active catalyst of ~~claim~~ Claim 14 at a temperature of from 320°C to 500°C.

Claim 16 (Currently Amended): The process of ~~claim~~ Claim 15 wherein the non-aromatic hydrocarbon is *n*-butane.

Claim 17 (New): The process of Claim 12, wherein the catalysts precursor has a carbon content in the range of 0.7 wt.% to 15.0 wt.%.

Claim 18 (New): The process of Claim 12, wherein the catalyst precursor has a carbon content in the range of 0.7 wt.% to 4 wt.%.

Claim 19 (New): The process of Claim 12, wherein the heat treatment of the catalysts precursor comprises the steps of:

- (a) initially heating the catalyst precursor to a temperature not to exceed 250 °C;
- (b) further heat treating the catalyst precursor from about 200°C to at least 380°C to 600°C at the maximum;
- (c) maintaining the temperature of stage (b) over a certain time; and
- (d) cooling the activated catalysts,

thereby maintaining an individually controlled atmosphere in all of the steps.

Claim 20 (New): The process of Claim 15, wherein the non-aromatic hydrocarbon is an aliphatic-C₄₋₁₀-hydrocarbon.

Claim 21 (New): The process of Claim 15, wherein the conversion is conducted in a fluidized bed reactor.

Claim 22 (New): The process of Claim 13, wherein the catalyst precursor has a carbon content in the range of 0.7 wt.% to 3 wt.%.

Claim 23 (New): The process of Claim 13, wherein the catalyst precursor has a carbon content in the range of 0.8 wt.% to 1.5 wt.%.

Claim 24 (New): An active vanadium/phosphorus mixed oxide catalyst for the production of maleic anhydride, that is prepared by the process of Claim 13.

Claim 25 (New): A process for the production of maleic anhydride, that comprises converting a feeding gas comprising (i) a non-aromatic hydrocarbon having at least 4 carbon atom and (ii) oxygen or an oxygen-containing gas, in the presence of the active catalyst of Claim 24 at a temperature from 320°C to 500°C.

Claim 26 (New): The process of Claim 25 wherein the non-aromatic hydrocarbon is *n*-butane.

Claim 27 (New): The process of Claim 25, wherein the non-aromatic hydrocarbon is an aliphatic-C₄₋₁₀-hydrocarbon.

Claim 28 (New): The process of Claim 25, wherein the conversion is conducted in a fluidized bed reactor.

Claim 29 (New): The active catalyst of Claim 14, wherein a promoter element is also present.

Claim 30 (New): The active catalyst of Claim 24, wherein a promoter element is also present.

Claim 31 (New): The active catalyst of Claim 14, wherein the active catalyst is in spherical particle shape.

Claim 32 (New): The active catalyst of Claim 24, wherein the active catalyst is in spherical particle shape.

Claim 33 (New): The process of Claim 15, wherein the conversion is at least 47.2 percent and the yield of maleic anhydride is at least 30.4 percent.

Claim 34 (New): A process for the transformation of [the] a vanadium/phosphorus mixed oxide catalyst precursor [of claim 9] into an active vanadium/phosphorus mixed oxide catalyst for the production of maleic anhydride, [which] said transformation process [comprises] comprising a heat treatment of the catalyst precursor at a [temperatures] temperature of up to 600°C to provide said active catalyst, said catalyst is prepared by a process comprising reacting a source of vanadium in an organic medium in the presence of a phosphorus source, the organic medium comprising:

(a) isobutyl alcohol or a mixture of isobutyl alcohol and benzyl alcohol, and

(b) a polyol in a weight ratio (a) to (b) of 99:1 to 5:95.